

REMARKS/ARGUMENTS

Applicants have carefully reviewed the above identified application in light of the Office Action dated October 6, 2004. Claims 1-29 remain presented for examination. Claims 1-3, 11 and 16-18 have been amended to define still more clearly what Applicants regard as their invention, in terms which distinguish over the art of record, and in particular to overcome the formal rejection.

Claims 1 and 16 are the only independent claims.

Applicants note with appreciation the indication that Claims 3-15 and 18-29 would be allowable if rewritten so as not to depend from a rejected claim, and with no change in scope. These claims have not been so rewritten because, for the reasons given below, their base claim is believed to be allowable.

Claims 1-2 and 16-17 were rejected under 35 U.S.C. § 103 as obvious from EP 1041496 (Lita) in view of U.S. published application US 2002/0007415 (Douglass). Claims 1-29 were rejected under 35 U.S.C. § 112, second paragraph, as indefinite.

The claims have been carefully reviewed and amended as deemed necessary to ensure that they conform fully to the requirements of Section 112, second paragraph, with special attention to the points raised in paragraph of the Office Action. It is believed that the rejection under Section 112, second paragraph, has been obviated, and its withdrawal is therefore respectfully requested.

The present invention as defined by independent claims 1 and 16 relates to a method for maintaining session affinity in a server farm coupled to receive client requests, said server farm comprising multiple server groups, each server group comprising multiple clone servers. This method comprises associating a collection of related client requests with a unique session identification code. Upon receipt of a client request, the method further comprises determining to which of said server groups the request can be dispatched. The method further comprises associating with said collection of requests sharing a session identification code a list of every server in said server farm that has serviced a request in said collection. Upon receipt of the client request, the method further comprises determining if said list associated with said collection of requests to which said request belongs includes a server identification code that matches a server

identification code of a server in said determined server group; and if a match is detected, dispatching said client request to said matched server.

As understood by Applicants, Lita relates to a method for use managing connection requests to a pool of servers identified by a given URL. Using a session identifier a “virtual” URL is generated that redirects the connection request to a given server. Any additional connection requests issued from the given client machine during the session request are redirected to the given server so that all content is served to the client from the same location. When the session terminates, the virtual URL is inactivated and the given server is returned to the pool so that it can then be assigned a new user session to manage.

Lita assigns a server to a session for its duration (e.g., “a given user may ... be assured that all such transactions are managed by the same server” col. 9, lines 52-55). Further, Lita creates a table 55 for each server for “storing session identifiers of the sessions being managed by that server” (col. 7, 50-55). The Office Action sites this same passage of Lita as teaching the feature of claim 1 (and claim 16) that for a collection of requests sharing a session identification code a list is created of every server in said server farm that has serviced a request. Clearly these lists are distinguishable as claim 1 establishes a correspondence from a session identification code to servers that have been utilized in that session. Lita’s correspondence not only is in the opposite direction but relates to one (and only one) server.

This distinction is not mere semantics as this feature of the present invention permits use of alternative servers when appropriate. By way of example, page 19 of the application addresses how this feature of the invention enables an alternative clone server, 14₁ to service a request when the previously utilized clone 14₃ is down (2nd paragraph) and further, how the invention would return to clone 14₃ once it came up again (4th paragraph).

As understood by Applicants, Douglass relates to a method of providing content distribution services while minimizing processor time required for security protocols. As illustrated in his Fig. 4 Douglass utilizes a table that includes a field for the client network address, on or more fields for identifying the cache server ... and a timer field to permit the entries to expire after some specified period of time” (page 3, paragraph 24). Douglass has a specific application wherein “subsequent packets received from the client related to a particular secure

connection, for a period of time up until the entry in the table expires, should be directed back to the same server that maintains the state information” (page 3, end of paragraph 24).

Applicants submit that it is inappropriate to combine Lita with Dougkis in the manner performed in the Office Action as the tables defined in each respective reference are incompatible with each other. Further, even if the combination were proper, it still does not yield the claimed feature of the invention wherein the list of servers in the present invention is utilized to find a match with a server having the proper identification code from those servers in a server group in a system that has multiple server groups. Dougkis merely uses his table to “direct subsequent packets to the same server that maintains the state information for the SSL connection”, and does so for a limited period of time (page 3, last sentence of paragraph 24).

Applicants submit that the prior art of Lita and Dougkis, either singly or in combination fails to teach or suggest the features of the present invention as defined by independent claims 1 and 16. In particular, they fail to teach the feature that a collection of requests sharing a session identification code is associated with a list of every server in said server farm that has serviced a request in said collection. In fact, both Lita and Dougkis teach away from the creation of such a list as their respective inventions emphasize the benefits attained by their inventions in using only one server. Accordingly, Applicants submit that claims 1 and 16 are deemed patentable over Lita and Dougkis.

A review of the other art of record has failed to reveal anything which, in Applicants' opinion, would remedy the deficiencies of the art discussed above, as references against independent claims 1 and 16. Those claims are therefore believed patentable over the art of record.

The other claims in this application are each dependent from one or another of the independent claims discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

In particular, with respect to claim 2 Applicants submit that the claimed feature of adding a unique server identification code corresponding to said server to a list of server identification codes associated with said session, without deleting any other server identification codes in said

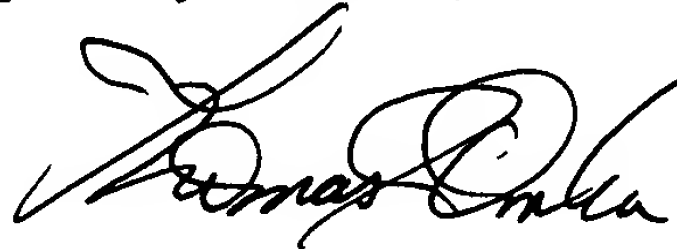
list is not taught by either Lita or Dougliis, either singly or in combination. In particular, Fig. 4 of Dougliis and the corresponding discussion at paragraph 24 of the specification only discuss identification of the cache server. Both Lita and Dougliis teach the use of only one server identification code in their respective tables -- they are silent, and in fact teach away from the feature of claim 2 where additional server identification codes are place on the list without deleting previous entries.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration and early passage to issue of the present application.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully Submitted,

By

A handwritten signature in black ink, appearing to read "Thomas J. Onka", written over a horizontal line.

Thomas J. Onka
Attorney for Applicant
Reg. No. 42,053

Synnestvedt Lechner & Woodbridge LLP
P.O. Box 592
Princeton, New Jersey 08542-0592
Tel (609) 924-3773
Fax (609) 924-1811